

PARUL UNIVERSITY
FACULTY OF PHARMACY
B.Pharm., Winter 2017-18 Examination

Semester: 4**Subject Code: 08101253****Subject Name: Pharmaceutical Microbiology****Date: 19/12/2017****Time: 02:00 pm to 05:00pm****Total Marks: 75****Instructions:**

1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1 Essay type Questions. (Any 2 out of 3) (10 marks each) (20)

1. Define: Sterilization. Describe various factors affecting on sterilization. Explain dry heat sterilization with Hot Air Oven in detail.
2. Define: Sterility test. Write principle of sterility test and describe in detail methods used for conducting sterility testing.
3. Define: Immunity. Describe types of immunity and explain in detail antigen-antibody reaction with its application.

Q.2 Short Essay type Questions. (Any 7 out of 9) (5 marks each) (35)

1. Define: Microbiology. Write its scope and application in pharmacy.
2. Write a note on bacteria with its classification.
3. Write a note on spirochaetes.
4. Write a note on virus with its classification.
5. Describe in detail: Bacterial growth curve.
6. Describe in detail: Differential staining.
7. Explain in detail Pasturisation method for sterilization.
8. Describe factors affecting rate of disinfection.
9. Describe in detail sterility tests for oil and oily solutions.

Q.3 Answer in short. (2 marks each) (20)

1. Define: 1) Psychrophiles 2) Thermophiles
2. Define: Bacteriophages. Give its classification.
3. Comment:
 - 1) Acidic dye repels the cells of microorganism.
 - 2) All pink colour bacteria are gram negative after gram staining.
4. Differentiate: Colour and Dye.
5. Explain incineration technique for sterilization.
6. Explain rideal walker test for evaluation of disinfection.
7. Give applications of ethylene oxide for disinfection.
8. Define: 1) Zone of inhibition 2) Zone of exhibition
9. Describe organs of immune system.
10. Write a short note on hypersensitivity.